CALIFORNIA DEPARTMENT OF WATER RESOURCES OROVILLE FACILITIES PRELIMINARY ISSUE SHEET

ISSUE STATEMENT:

Are the present streamflows defined under the State Water Project's Feather River Flow Constraints being met and are they adequately protecting steelhead and fall, late-fall, and spring-run Chinook salmon in the low flow section and in the river downstream of Thermalito Afterbay for migrating, holding, spawning, and rearing of steelhead and fall, late fall, and spring-run Chinook salmon?

RESOURCE GOALS:

Protection of steelhead and fall, late-fall, and spring-run Chinook salmon. Maintain diversity of habitats.

Natural reproduction of anadromous fish

EXISTING INFORMATION:

- 1. Feather River Flow Constraints
- 2. Historic stream flows in low flow section and downstream of Thermalito Afterbay
- 3. Steelhead and salmon life histories in the Feather River
- **4.** Juvenile fall and spring-run salmon abundance and emigration patterns
- 5. Historic records for naturally spawning adult fall and spring-run Chinook and steelhead
- **6.** Oroville fish hatchery counts
- 7. Recent studies of juvenile steelhead rearing and adult spawning
- **8.** Habitat preferences of salmon and steelhead
- 9. Factors affecting the distribution of Chinook salmon on the lower Feather River

INFORMATION NEEDED:

- 1. Emigration data on spring-run Chinook juveniles and spawning escapement data
- 2. Genetic distinctness of Feather River spring-run Chinook
- 3. Super-imposition losses in low flow channel
- 4. Effects of Feather River hatchery on naturally spawning Chinook
- 5. Length of stay of adult steelhead in river after spawning and post-spawning mortality
- **6.** Information on the number of naturally spawning steelhead
- 7. Steelhead habitat preferences within the Feather River
- **8.** Information on steelhead spawning in the lower Feather River
- 9. Instream flow study of low flow channel and lower Feather River

LEVEL OF ANALYSIS NEEDED/GEOGRAPHIC SCOPE:

Site specific studies on emigration and spawning escapement, detailed instream flow assessment in low flow channel and lower Feather River downstream to Yuba River confluence, less detailed study of Feather River downstream to confluence to Sacramento River. Geographic scope is the low flow channel and the lower Feather River from the Thermalito Afterbay outlet to the Sacramento River.